

MERRILL MINING, LLC
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Atlanta, Georgia 30342
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ROGER AMES
ENVIRONMENTAL MANAGER

January 27, 2005

Mr. Barry Rechtorovich
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

WATER PERMITS

JAN 31 2005

R E C E I V E D

Mr. Martin Zeleznik
Ground Water Office WTR-0
US Environmental Protection Agency Region IX
Water Management Division (WTR-9)
75 Hawthorne Street
San Francisco, California 94105-3901

15-121622.009

Subject: Cessation of Hydraulic Control
Florence Copper, Florence, Arizona
Aquifer Protect Permit No. 101704
Underground Injection Control Permit No. AZ39600001

Gentlemen:

This is to inform you of the final results of sampling that was conducted following cessation of hydraulic control at the Florence Project In-Situ Test Field.

Following your approval, hydraulic control was suspended for 90 days beginning on September 1, 2004, in accordance with the procedure outlined in Chapter 6 of the *Proposed Cessation of Hydraulic Control at the Florence Project In-Situ Test Field*, dated April 21, 2004. Sampling was performed on December 6 and 7, 2004, within 10 days following the 90th day of the suspension. Samples were preserved for analysis of all Aquifer Protection Permit (APP) Part IV, Table III.C constituents, excluding organics, and analyzed for sulfates. Sulfate results from the December 2003 and December 2004 sampling events were presented to you in a letter dated December 29, 2004 and are included as Table 1.

Step 4 of the schedule presented in Section 6 includes the three following paragraphs that prescribe the analyses that are to be performed depending upon the reported sulfate concentrations.

- (a) If the sulfate value does not exceed the 2003 sulfate value by a factor of more than 1.25, the groundwater will be considered to have met the conditions of both the APP and Underground Injection Control (UIC) permit and no further analysis will be required.
- (b) If the sulfate value exceeds the 2003 value by a factor of more than 1.25, but is less than either of the 2000 or 2001 sulfate values, any constituents, excluding gross alpha and radium, from preceding years which exceeded Aquifer Water Quality Standard (AWQS) will be analyzed. If these constituents are found to meet AWQS or if the well has no history of AWQS exceedances other than gross alpha and radium, then groundwater will be considered to have met the conditions of both the APP and UIC permit and no further analysis will be required. If an AWQS exceedance is reported, rinsing will continue.
- (c) If the sulfate value exceeds the 2003 sulfate value by more than a factor of 1.25 and also exceeds the values reported in 2000 and 2001, the sample will be analyzed for all Part IV, Table III.C constituents excluding organics. If the analysis indicates that all constituents other than gross alpha and radium meet the numeric AWQS, the groundwater will be considered to have met the conditions of both the APP and UIC permit and no further work will be required. If any of the constituents, other than gross alpha or radium, exceed the numeric AWQS, rinsing will continue.

Samples from two wells, BHP-4 and OWB-3, had sulfate concentrations that exceeded the 2003 concentrations by more than a factor of 1.25. In both cases, the sulfate values also exceeded the values reported in 2000 and 2001. Therefore, samples from BHP-4 and OWB-3 were analyzed for all Part IV, Table III.C constituents, excluding organics. Organics are excluded because, as explained in Section 6, none have been detected in any of the samples collected during the three previous sampling events. The December 2004 results are compared to previous results in Table 2. All results were below the associated AWQS. Laboratory data for the December 2004 sampling event is included as Attachment 1.

This concludes the 90-day test in accordance with the permit. Florence Copper is therefore requesting permission at this time to abandon the wells in the test field.

Mr. Barry Rechtorovich, Mr. Martin Zeleznik

January 27, 2005

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Please contact me at (480) 596-0605 should you have any questions regarding this letter.

Sincerely,



Roger Ames
Environmental Manager

BAS:lld
Attachments

cc: Florence Copper File – Pete Kelm
Barbara Sylvester, Brown and Caldwell

Florence Copper
Florence, Arizona

TABLE 1. TEST FIELD - SULFATE RESULTS

Well ID	Dec-2003	1.25 Factor	Dec-2004
Injection/Pumping Wells			
BHP-6	150	188	130
BHP-7	97	121	85
BHP-8	160	200	150
BHP-9	130	163	110
Recovery Wells			
BHP-1	130	163	110
BHP-2	67	84	58
BHP-3	69	86	66
BHP-4	130	163	180
BHP-5	67	84	68
BHP-10	60	75	55
BHP-11	97	121	95
BHP-12	76	95	70
BHP-13	57	71	51
Observation Wells			
CH1-B	140	175	96
CH1-R	300	375	300
CH2-B	120	150	90
CH2-R	100	125	86
OWB-1	62	78	57
OWB-2	180	225	160
OWB-3	58	73	76
OWB-4	59	74	49
OWB-5	60	75	55
All results are in milligrams per liter (mg/L) NA = Not sampled or not analyzed Bold indicates values that exceeded the 1.25 factor increase threshold			

Florence Copper
Florence, Arizona

TABLE 2. TEST FIELD RESULTS

Analyte	BHP-4				OWB-3				AWQS	Units
	Sep-00	Jun-01	Dec-03	Dec-04	Sep-00	Jun-01	Dec-03	Dec-04		
Field Parameters										
Temperature	23.5	24.1	22.8	23.3	23.6	23.7	22.2	22.4	NE	C
pH	7.12	7.14	6.96	7.10	6.98	7.53	7.23	7.83	NE	pH
Electroconductivity	918	874	853	982	822	805	775	817	NE	umhos/sec
Metals										
Aluminum	0.043	<0.025	<0.1	<0.20	0.026	<0.025	<0.1	<0.20	NE	mg/L
Antimony	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	mg/L
Arsenic	<0.001	<0.001	0.002	0.0017	0.0014	<0.001	0.0016	0.0015	0.05	mg/L
Barium	0.022	0.017	0.017	0.019	0.017	0.018	0.014	0.016	2	mg/L
Beryllium	<0.0025	<0.002	<0.001	<0.001	<0.0025	<0.002	<0.001	<0.001	0.004	mg/L
Cadmium	<0.002	<0.002	<0.001	<0.001	<0.002	<0.002	<0.001	<0.001	0.005	mg/L
Chromium	<0.005	<0.005	0.0011	<0.001	<0.005	<0.005	0.0013	0.0012	0.1	mg/L
Cobalt	<0.005	<0.005	<0.001	0.0035	<0.005	<0.005	<0.001	<0.001	NE	mg/L
Copper	0.43	0.29	0.22	0.22	0.014	0.011	0.016	0.0083	NE	mg/L
Iron	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NE	mg/L
Lead	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.05	mg/L
Manganese	0.053	0.025	0.014	0.014	<0.0025	<0.0025	<0.0025	<0.0025	NE	mg/L
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	mg/L
Nickel	<0.02	<0.02	0.0062	0.0072	<0.02	<0.02	0.002	0.0018	0.1	mg/L
Selenium	0.001	0.0015	0.0012	<0.001	0.0014	<0.001	<0.001	<0.001	0.05	mg/L
Thallium	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.001	<0.001	0.002	mg/L
Zinc	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NE	mg/L

Florence Copper
Florence, Arizona

TABLE 2. TEST FIELD RESULTS

Analyte	BHP-4				OWB-3				AWQS	Units
	Sep-00	Jun-01	Dec-03	Dec-04	Sep-00	Jun-01	Dec-03	Dec-04		
Common Ions										
Total Alkalinity	120	120	130	110	140	140	160	140	NE	mg/L
Calcium	85	71	72	89	69	66	61	70	NE	mg/L
Chloride	150	140	140	120	140	120	130	130	NE	mg/L
Fluoride	1.2	1.1	0.88	1.10	0.52	0.53	0.53	0.60	4	mg/L
Magnesium	19	16	16	20	14	13	12	14	NE	mg/L
Nitrate, as N	<0.1	<0.5	0.45	0.66	0.36	<0.5	0.46	0.63	10	mg/L
Potassium	6.1	5.1	7.6	8.6	5.1	5.2	6.7	7.0	NE	mg/L
Sodium	87	76	94	110	85	82	90	97	NE	mg/L
Sulfate	110	93	130	180	57	48	58	76	NE	mg/L
Total Dissolved Solids	493	517	550	710	445	487	480	530	NE	mg/L
Ion Balance	11	7	2	10.4	12	16	3.77	9.95	NE	Calc
Radiochemicals										
Gross Alpha	NA	19.3 ± 2.3	16.0 ± 1.9	14.2 ± 1.9	NA	8.2 ± 1.4	8.7 ± 1.3	9.9 ± 1.6	NE	pCi/L
Uranium	NA	7.2 ± 1.4	7.5 ± 1.0	NA	NA	NA	NA	NA	NE	pCi/L
Adjusted Gross Alpha	NA	12.1 ± 2.7	8.5 ± 2.2	NA	NA	NA	NA	NA	15	pCi/L
Radium 226	NA	2.8 ± 0.5	2.1 ± 0.2	2.9 ± 0.3	NA	1.3 ± 0.2	1.7 ± 0.2	1.5 ± 0.2	NE	pCi/L
Radium 228	NA	2.3 ± 0.3	0.3 ± 0.3	0.7 ± 0.3	NA	0.8 ± 0.3	<0.3	0.6 ± 0.3	NE	pCi/L
Total Radium	NA	5.1 ± 0.6	2.4 ± 0.4	3.6 ± 0.4	NA	2.1 ± 0.4	1.7 ± 0.2	2.1 ± 0.4	5	pCi/L

< = Less than reporting limit

NA = Not Analyzed

AWQS = Aquifer Water Quality Standard

NE = Not Established

Bold indicates values exceeds AWQS

Uranium is analyzed when Gross Alpha exceeds 15.0

Adjusted Gross Alpha = Gross Alpha - Uranium

Radium 226 and Radium 228 are analyzed when Gross Alpha exceeds 5.0

Total Radium = Radium 226 + Radium 228

ATTACHMENT 1
ANALYTICAL REPORTS



Aerotech Environmental Laboratories

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Friday, January 21, 2005

Amended 1/21/2005

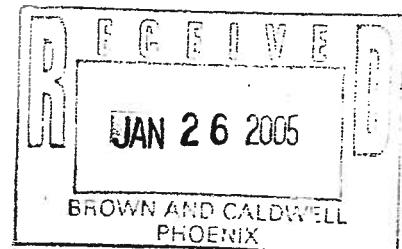
Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004

TEL: (602) 567-4000
FAX: (602) 567-4001

RE: Florence Copper

Order No.: 04120578

Dear Barbara Sylvester:



This report was amended on 1/21/2005 to add additional analyses.

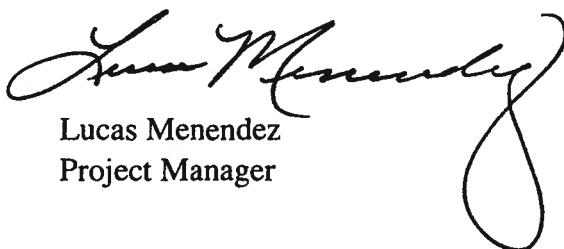
Aerotech Environmental received 13 sample(s) on 12/6/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,



Lucas Menendez
Project Manager



Aerotech Environmental Laboratories

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Wednesday, December 22, 2004

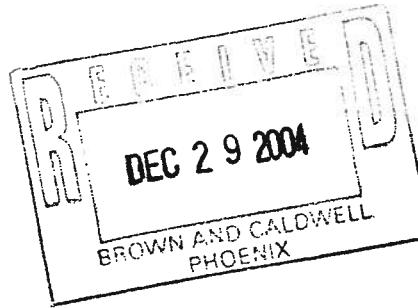
Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004

TEL: (602) 567-4000
FAX (602) 567-4001

RE: Florence Copper

Order No.: 04120578

Dear Barbara Sylvester:



Aerotech Environmental received 13 sample(s) on 12/6/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Lucas Menendez
Project Manager



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Aerotech Environmental

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 04120578

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

B1 Target analyte detected in method blank at or above the method reporting limit.

D2 Sample required dilution due to high concentration of target analyte.

H1 Sample analysis performed past holding time.

M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

N1 The sample selected as the duplicate and matrix spike contained high concentrations of chloride and/or sulfate. The analyte concentration in the sample is disproportionate to the spike level and it was not practical to analyze the sample at a dilution, as the spike would be diluted out. The LCS/LCSD



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CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 04120578

CASE NARRATIVE

were recovered acceptably demonstrating that the analytical process was in control.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-01A

Client Sample ID: BHP-8
Tag Number:
Collection Date: 12/6/2004 7:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY Sulfate	150	E300 10		mg/L	5	Analyst: T S 12/6/2004 10:16:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-02A

Client Sample ID: BHP-9
Tag Number:
Collection Date: 12/6/2004 8:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	110	10		mg/L	5	12/6/2004 10:34:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-03A

Client Sample ID: BHP-6
Tag Number:
Collection Date: 12/6/2004 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	130	10		mg/L	5	12/6/2004 10:53:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

Page 3 of 14

- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-04A

Client Sample ID: BHP-4
Tag Number:
Collection Date: 12/6/2004 8:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
Chloride	120	10		mg/L	5	12/6/2004 11:11:00 PM
Fluoride	1.1	0.40		mg/L	1	12/6/2004 5:20:00 PM
Nitrogen, Nitrate (As N)	0.66	0.20		mg/L	1	12/6/2004 5:20:00 PM
Sulfate	180	10		mg/L	5	12/6/2004 11:11:00 PM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	110	2.0	B1;H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Total (As CaCO ₃)	110	6.0	H1	mg/L CaCO ₃	1	12/29/2004
CATION/ANION BALANCE						
Cation/Anion Balance	10.4			CALC		Analyst: D N
		0		% difference	1	1/6/2005
PH (3)						
pH	7.56	2.00	H1	pH units	1	12/28/2004 3:42:00 PM
RESIDUE, FILTERABLE						
Total Dissolved Solids	710	10	H1	mg/L	1	12/14/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-04B

Client Sample ID: BHP-4
Tag Number:
Collection Date: 12/6/2004 8:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED						
Aluminum, Dissolved	< 0.20	0.20		mg/L	1	12/17/2004
Calcium, Dissolved	89	2.0		mg/L	1	12/17/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
Magnesium, Dissolved	20	2.0		mg/L	1	12/17/2004
Potassium, Dissolved	8.6	2.0		mg/L	1	12/17/2004
Sodium, Dissolved	110	2.0		mg/L	1	12/17/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
ICP/MS METALS, DISSOLVED						
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Arsenic, Dissolved	0.0017	0.0010		mg/L	1	1/3/2005
Barium, Dissolved	0.019	0		mg/L	1	1/3/2005
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Cobalt, Dissolved	0.0035	0.0010		mg/L	1	1/3/2005
Copper, Dissolved	0.22	0.0010		mg/L	1	1/3/2005
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Manganese, Dissolved	0.014	0.0025		mg/L	1	1/3/2005
Nickel, Dissolved	0.0072	0.0010		mg/L	1	1/3/2005
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
DISSOLVED MERCURY IN WATERS						
Mercury, Dissolved	< 0.00020	0.00020		mg/L	1	12/30/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-05A

Client Sample ID: BHP-3
Tag Number:
Collection Date: 12/6/2004 9:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	66	2.0		mg/L	1	12/6/2004 5:38:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-06A

Client Sample ID: BHP-7
Tag Number:
Collection Date: 12/6/2004 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	85	2.0		mg/L	1	12/6/2004 5:57:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-07A

Client Sample ID: BHP-10
Tag Number:
Collection Date: 12/6/2004 9:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	55	2.0		mg/L	1	12/6/2004 6:15:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-08A

Client Sample ID: BHP-5
Tag Number:
Collection Date: 12/6/2004 10:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	68	2.0		mg/L	1	12/6/2004 6:34:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-09A

Client Sample ID: OWB-6
Tag Number:
Collection Date: 12/6/2004 10:20:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	67	2.0		mg/L	1	12/6/2004 6:52:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-10A

Client Sample ID: BHP-2
Tag Number:
Collection Date: 12/6/2004 10:30:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY Sulfate	58	E300 2.0		mg/L	1	Analyst: T S 12/6/2004 7:11:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-11A

Client Sample ID: BHP-12
Tag Number:
Collection Date: 12/6/2004 10:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	70	2.0		mg/L	1	12/6/2004 8:43:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-12A

Client Sample ID: OWB-7
Tag Number:
Collection Date: 12/6/2004 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	70	2.0		mg/L	1	12/6/2004 9:39:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120578
Project: Florence Copper
Lab ID: 04120578-13A

Client Sample ID: BHP-13
Tag Number:
Collection Date: 12/6/2004 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	51	2.0		mg/L	1	12/6/2004 9:57:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	MB-19992	SampType:	MBLK	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722		
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653715		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved		< 0.20	0.20										
Calcium, Dissolved		< 2.0	2.0										
Iron, Dissolved		< 0.050	0.050										
Magnesium, Dissolved		< 2.0	2.0										
Potassium, Dissolved		< 2.0	2.0										
Sodium, Dissolved		< 2.0	2.0										
Sample ID	MB-19992	SampType:	MBLK	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722		
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/21/2004	SeqNo:	655368		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc, Dissolved		< 0.050	0.050										
Sample ID	LCS-19992	SampType:	LCS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722		
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653713		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved		0.9800	0.20	1	0	98.0	85	115					
Calcium, Dissolved		10.50	2.0	10.5	0	100	85	115					
Iron, Dissolved		0.5070	0.050	0.5	0	101	85	115					
Magnesium, Dissolved		10.50	2.0	10.5	0	100	85	115					
Potassium, Dissolved		10.30	2.0	10	0	103	85	115					
Sodium, Dissolved		9.900	2.0	10	0	99.0	85	115					

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	LCS-19992	SampType:	LCS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/21/2004	SeqNo:	655369
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Zinc, Dissolved		0.4950	0.050	0.5	0	99.0	85	115			Qual
Sample ID	LCSD-19992	SampType:	LCSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653714
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.020	0.20	1	0	102	85	115	0.9800	4.00	20
Calcium, Dissolved		10.60	2.0	10.5	0	101	85	115	10.50	0.948	20
Iron, Dissolved		0.5200	0.050	0.5	0	104	85	115	0.5070	2.53	20
Magnesium, Dissolved		10.80	2.0	10.5	0	103	85	115	10.50	2.82	20
Potassium, Dissolved		10.40	2.0	10	0	104	85	115	10.30	0.966	20
Sodium, Dissolved		10.20	2.0	10	0	102	85	115	9.900	2.99	20
Sample ID	LCSD-19992	SampType:	LCSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/21/2004	SeqNo:	655370
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Zinc, Dissolved		0.4920	0.050	0.5	0	98.4	85	115	0.4950	0.608	20
Sample ID	04120697-02B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653711
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131			
Calcium, Dissolved		382.0	2.0	10.5	371.0	105	70	130			
Iron, Dissolved		0.4810	0.050	0.5	0	96.2	84.7	117			
Magnesium, Dissolved		57.20	2.0	10.5	47.40	93.3	79	121			
Potassium, Dissolved		23.60	2.0	10	7.860	157	70	130			M6

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	04120697-02B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722	
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653711	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium, Dissolved		96.00	2.0	10	82.30	137	70	130			M6	

Sample ID	04120697-06B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722	
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	654154	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131				
Calcium, Dissolved		378.0	2.0	10.5	363.0	143	70	130			M6	
Iron, Dissolved		0.4640	0.050	0.5	0	92.8	84.7	117				
Magnesium, Dissolved		57.90	2.0	10.5	47.70	97.1	79	121				
Potassium, Dissolved		23.30	2.0	10	7.750	156	70	130			M6	
Sodium, Dissolved		97.20	2.0	10	81.20	160	70	130			M6	
Zinc, Dissolved		0.5340	0.050	0.5	0	107	88.1	117				

Sample ID	04120697-02B MSD	SampType:	MSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722	
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653712	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131	1.080	0	9.98	
Calcium, Dissolved		377.0	2.0	10.5	371.0	57.1	63.1	131	382.0	1.32	5.57	M7
Iron, Dissolved		0.4800	0.050	0.5	0	96.0	84.7	117	0.4810	0.208	6.3	
Magnesium, Dissolved		57.80	2.0	10.5	47.40	99.0	79	121	57.20	1.04	4.55	
Potassium, Dissolved		23.80	2.0	10	7.860	159	70	130	23.60	0.844	5.29	M6
Sodium, Dissolved		98.10	2.0	10	82.30	158	70	130	96.00	2.16	7.28	M6

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	04120697-06B MSD	SampType:	MSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	654155
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved	1.080	0.20	1	0	108	86.8	131	1.080	0	9.98	
Calcium, Dissolved	377.0	2.0	10.5	363.0	133	63.1	131	378.0	0.265	5.57	M6
Iron, Dissolved	0.4640	0.050	0.5	0	92.8	84.7	117	0.4640	0	6.3	
Magnesium, Dissolved	56.80	2.0	10.5	47.70	86.7	79	121	57.90	1.92	4.55	
Potassium, Dissolved	23.20	2.0	10	7.750	154	70	130	23.30	0.430	5.29	M6
Sodium, Dissolved	95.20	2.0	10	81.20	140	70	130	97.20	2.08	7.28	M6
Zinc, Dissolved	0.5310	0.050	0.5	0	106	88.1	117	0.5340	0.563	5.13	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	MB-20120	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128		
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658599		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	< 0.0010	0.0010											
Arsenic, Dissolved	< 0.0010	0.0010											
Barium, Dissolved	< 0.0010	0.0010											
Beryllium, Dissolved	< 0.0010	0.0010											
Cadmium, Dissolved	< 0.0010	0.0010											
Chromium, Dissolved	< 0.0010	0.0010											
Cobalt, Dissolved	< 0.0010	0.0010											
Copper, Dissolved	< 0.0010	0.0010											
Lead, Dissolved	< 0.0010	0.0010											
Manganese, Dissolved	< 0.0050	0.0050											
Nickel, Dissolved	< 0.0010	0.0010											
Selenium, Dissolved	< 0.0010	0.0010											
Thallium, Dissolved	< 0.0010	0.0010											

Sample ID	LCS-20120	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128		
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658600		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.1051	0.0010	0.1	0	105	85	115						
Arsenic, Dissolved	0.1077	0.0010	0.1	0	108	85	115						
Barium, Dissolved	0.1055	0.0010	0.1	0	106	85	115						
Beryllium, Dissolved	0.1064	0.0010	0.1	0	106	85	115						
Cadmium, Dissolved	0.1047	0.0010	0.1	0	105	85	115						
Chromium, Dissolved	0.1009	0.0010	0.1	0	101	85	115						
Cobalt, Dissolved	0.1017	0.0010	0.1	0	102	85	115						
Copper, Dissolved	0.09951	0.0010	0.1	0	99.5	85	115						
Lead, Dissolved	0.1007	0.0010	0.1	0	101	85	115						
Manganese, Dissolved	0.1022	0.0050	0.1	0	102	85	115						
Nickel, Dissolved	0.1005	0.0010	0.1	0	101	85	115						

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	LCS-20120	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658600	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Selenium, Dissolved 0.1095 0.0010 0.1 0 109 85 115

Thallium, Dissolved 0.1042 0.0010 0.1 0 104 85 115

Sample ID	LCSD-20120	SampType:	LCSD	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658610	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved 0.1043 0.0010 0.1 0 104 85 115 0.1051 0.745 20

Arsenic, Dissolved 0.1062 0.0010 0.1 0 106 85 115 0.1077 1.43 20

Barium, Dissolved 0.1056 0.0010 0.1 0 106 85 115 0.1055 0.0758 20

Beryllium, Dissolved 0.1061 0.0010 0.1 0 106 85 115 0.1064 0.227 20

Cadmium, Dissolved 0.1047 0.0010 0.1 0 105 85 115 0.1047 0.0105 20

Chromium, Dissolved 0.09924 0.0010 0.1 0 99.2 85 115 0.1009 1.67 20

Cobalt, Dissolved 0.1005 0.0010 0.1 0 100 85 115 0.1017 1.27 20

Copper, Dissolved 0.09906 0.0010 0.1 0 99.1 85 115 0.09951 0.456 20

Lead, Dissolved 0.1011 0.0010 0.1 0 101 85 115 0.1007 0.408 20

Manganese, Dissolved 0.1013 0.0050 0.1 0 101 85 115 0.1022 0.877 20

Nickel, Dissolved 0.09952 0.0010 0.1 0 99.5 85 115 0.1005 0.981 20

Selenium, Dissolved 0.1104 0.0010 0.1 0 110 85 115 0.1095 0.823 20

Thallium, Dissolved 0.1041 0.0010 0.1 0 104 85 115 0.1042 0.139 20

Sample ID	04120578-04B MS	SampType:	MS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:	BHP-4	Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658602	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HlghLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved 0.08708 0.0010 0.1 0 87.1 75.9 121

Arsenic, Dissolved 0.1008 0.0010 0.1 0.001667 99.1 76.1 124

Barium, Dissolved 0.1087 0.0010 0.1 0.01861 90.1 76.3 115

Beryllium, Dissolved 0.09860 0.0010 0.1 0 98.6 70 130

Qualifiers: E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



Aerotech Environmental Laboratories
a division of Aerotech Laboratories, Inc.

CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	04120578-04B MS	SampType:	MS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:	BHP-4	Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658602
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual											

Cadmium, Dissolved	0.08252	0.0010	0.1	0	82.5	74.9	112				
Chromium, Dissolved	0.09833	0.0010	0.1	0	98.3	70	130				
Cobalt, Dissolved	0.09544	0.0010	0.1	0.003494	92.0	74	119				
Copper, Dissolved	0.2834	0.0010	0.1	0.2174	66.0	70	130				M7
Lead, Dissolved	0.09390	0.0010	0.1	0	93.9	70.6	119				
Manganese, Dissolved	0.1131	0.0050	0.1	0.01362	99.5	72.9	127				
Nickel, Dissolved	0.09442	0.0010	0.1	0.007203	87.2	74.5	111				
Selenium, Dissolved	0.09808	0.0010	0.1	0	98.1	74.6	121				
Thallium, Dissolved	0.09699	0.0010	0.1	0	97.0	70.7	121				

Sample ID	04120578-04B MSD	SampType:	MSD	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:	BHP-4	Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658603
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual											
Antimony, Dissolved	0.08716	0.0010	0.1	0	87.2	75.9	121	0.08708	0.0849		10
Arsenic, Dissolved	0.09951	0.0010	0.1	0.001667	97.8	76.1	124	0.1008	1.28		10
Barium, Dissolved	0.1091	0.0010	0.1	0.01861	90.5	76.3	115	0.1087	0.401		10
Beryllium, Dissolved	0.09941	0.0010	0.1	0	99.4	70	130	0.09860	0.817		10
Cadmium, Dissolved	0.08184	0.0010	0.1	0	81.8	74.9	112	0.08252	0.820		10
Chromium, Dissolved	0.09660	0.0010	0.1	0	96.6	70	130	0.09833	1.77		10
Cobalt, Dissolved	0.09386	0.0010	0.1	0.003494	90.4	74	119	0.09544	1.67		10
Copper, Dissolved	0.2748	0.0010	0.1	0.2174	57.4	70	130	0.2834	3.08		10
Lead, Dissolved	0.09311	0.0010	0.1	0	93.1	70.6	119	0.09390	0.846		10
Manganese, Dissolved	0.1099	0.0050	0.1	0.01362	96.3	72.9	127	0.1131	2.87		10
Nickel, Dissolved	0.09318	0.0010	0.1	0.007203	86.0	74.5	111	0.09442	1.33		10
Selenium, Dissolved	0.09701	0.0010	0.1	0	97.0	74.6	121	0.09808	1.10		10
Thallium, Dissolved	0.09732	0.0010	0.1	0	97.3	70.7	121	0.09699	0.347		10

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_DISS

Sample ID	MB-20098	SampType:	MBLK	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:		Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657962	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved	< 0.00020	0.00020										
Sample ID	LCS-20098	SampType:	LCS	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:		Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657963	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved	0.005100	0.00020	0.005	0	102	85	115					
Sample ID	LCSD-20098	SampType:	LCSD	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	<th>Batch ID:</th> <td>20098</td> <th>TestNo:</th> <td>E245.1</td> <th></th> <th></th> <th>Analysis Date:</th> <td>12/30/2004</td> <th>SeqNo:</th> <td>657964</td>	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657964	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved	0.005110	0.00020	0.005	0	102	85	115	0.005100	0.196	20		
Sample ID	04120578-04BMS	SampType:	MS	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	BHP-4	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657966	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved	0.005000	0.00020	0.005	0	100	70	130					
Sample ID	04120578-04BMSD	SampType:	MSD	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	BHP-4	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657967	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved	0.005110	0.00020	0.005	0	102	70	130	0.005000	2.18	20		

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	MB-R54313	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54313	
Client ID:		Batch ID:	R54313	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649055	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		< 0.40		0.40								
Nitrogen, Nitrate (As N)		< 0.20		0.20								
Sulfate		< 2.0		2.0								
Sample ID	MB-R54315	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54315	
Client ID:		Batch ID:	R54315	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649082	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0		2.0								
Sulfate		< 2.0		2.0								
Sample ID	LCS-R54313	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54313	
Client ID:	<th>Batch ID:</th> <td>R54313</td> <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th>Analysis Date:</th> <td>12/6/2004</td> <th>SeqNo:</th> <td>649056</td>	Batch ID:	R54313	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649056	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		4.108	0.40	4	0	103	90	110				
Nitrogen, Nitrate (As N)		3.913	0.20	4	0	97.8	90	110				
Sulfate		20.08	2.0	20	0	100	90	110				
Sample ID	LCS-R54315	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54315	
Client ID:	<th>Batch ID:</th> <td>R54315</td> <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th>Analysis Date:</th> <td>12/6/2004</td> <th>SeqNo:</th> <td>649083</td>	Batch ID:	R54315	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649083	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		19.54	2.0	20	0	97.7	90	110				N1
Sulfate		20.02	2.0	20	0	100	90	110				

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	LCSD-R54313	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54313		
Client ID:	<th>Batch ID:</th> <td>R54313</td> <th>TestNo:</th> <td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649066</td><td data-kind="ghost"></td></td>	Batch ID:	R54313	TestNo:	E300 <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date:</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td>12/6/2004</td> <td data-cs="2" data-kind="parent">SeqNo: 649066</td> <td data-kind="ghost"></td>			Analysis Date:			12/6/2004	SeqNo: 649066	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Fluoride		4.108	0.40	4	0	103	90	110	4.108	0	20		
Nitrogen, Nitrate (As N)		3.916	0.20	4	0	97.9	90	110	3.913	0.0766	20		
Sulfate		20.08	2.0	20	0	100	90	110	20.08	0.0199	20		
Sample ID	LCSD-R54315	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54315		
Client ID:	<th>Batch ID:</th> <td>R54315<th>TestNo:</th><td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649093</td><td data-kind="ghost"></td></td></td>	Batch ID:	R54315 <th>TestNo:</th> <td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649093</td><td data-kind="ghost"></td></td>	TestNo:	E300 <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date:</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td>12/6/2004</td> <td data-cs="2" data-kind="parent">SeqNo: 649093</td> <td data-kind="ghost"></td>			Analysis Date:			12/6/2004	SeqNo: 649093	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Chloride		19.52	2.0	20	0	97.6	90	110	19.54	0.138	20	N1	
Sulfate		20.01	2.0	20	0	100	90	110	20.02	0.0300	20		
Sample ID	04120578-01AMS	SampType:	MS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54313		
Client ID:	BHP-8 <th>Batch ID:</th> <td>R54313<th>TestNo:</th><td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649059</td><td data-kind="ghost"></td></td></td>	Batch ID:	R54313 <th>TestNo:</th> <td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649059</td><td data-kind="ghost"></td></td>	TestNo:	E300 <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date:</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td>12/6/2004</td> <td data-cs="2" data-kind="parent">SeqNo: 649059</td> <td data-kind="ghost"></td>			Analysis Date:			12/6/2004	SeqNo: 649059	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Fluoride		5.381	0.40	4	1.082	107	80	120					
Nitrogen, Nitrate (As N)		4.346	0.20	4	0	109	80	120					
Sample ID	04120578-11AMS	SampType:	MS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54315		
Client ID:	BHP-12 <th>Batch ID:</th> <td>R54315<th>TestNo:</th><td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649090</td><td data-kind="ghost"></td></td></td>	Batch ID:	R54315 <th>TestNo:</th> <td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649090</td><td data-kind="ghost"></td></td>	TestNo:	E300 <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date:</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td>12/6/2004</td> <td data-cs="2" data-kind="parent">SeqNo: 649090</td> <td data-kind="ghost"></td>			Analysis Date:			12/6/2004	SeqNo: 649090	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate		87.84	2.0	20	70.08	88.8	80	120					
Sample ID	04120578-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54313		
Client ID:	BHP-8 <th>Batch ID:</th> <td>R54313<th>TestNo:</th><td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649058</td><td data-kind="ghost"></td></td></td>	Batch ID:	R54313 <th>TestNo:</th> <td>E300<td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date:</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td>12/6/2004</td><td data-cs="2" data-kind="parent">SeqNo: 649058</td><td data-kind="ghost"></td></td>	TestNo:	E300 <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date:</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td>12/6/2004</td> <td data-cs="2" data-kind="parent">SeqNo: 649058</td> <td data-kind="ghost"></td>			Analysis Date:			12/6/2004	SeqNo: 649058	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Qualifiers: E Value above quantitation range

ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

J Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	04120578-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54313
Client ID:	BHP-8	Batch ID:	R54313	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649058
Analyte											
Fluoride		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
	1.079		0.40						1.082	0.278	20
Nitrogen, Nitrate (As N)	0.7030		0.20						0	200	20
Sample ID	04120578-11ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54315
Client ID:	BHP-12	Batch ID:	R54315	TestNo:	E300			Analysis Date:	12/6/2004	SeqNo:	649089
Analyte											
Sulfate	70.07	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
			2.0						70.08	0.0114	20

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R PPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT**TestCode: ALKALINITY**

Sample ID	MB-R55031	SampType:	MLBK	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657359
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Alkalinity, Bicarbonate (As CaCO ₃)	2.000	2.0									B1
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0									
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0									
Alkalinity, Total (As CaCO ₃)	< 6.0	6.0									
Sample ID	LCS-R55031	SampType:	LCS	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657360
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Alkalinity, Total (As CaCO ₃)	254.0	6.0	250	0	102	90	110				
Sample ID	04120174-01ADUP	SampType:	DUP	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657362
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Alkalinity, Bicarbonate (As CaCO ₃)	126.0	2.0							126.0	0	20
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0							0	0	20
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0							0	0	20
Alkalinity, Total (As CaCO ₃)	126.0	6.0							126.0	0	20

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: PH_W

Sample ID	LCS-R55011	SampType:	LCS	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011
Client ID:		Batch ID:	R55011	TestNo:	E150.1			Analysis Date:	12/28/2004	SeqNo:	657075
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
pH		7.010	2.00	7	0	100	99.28	100.72			Qual
Sample ID	LCSD-R55011	SampType:	LCSD	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011
Client ID:		Batch ID:	R55011	TestNo:	E150.1			Analysis Date:	12/28/2004	SeqNo:	657079
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
pH		7.000	2.00	7	0	100	99.28	100.72	7.010	0.143	10
Sample ID	04121383-04ADUP	SampType:	DUP	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011
Client ID:		Batch ID:	R55011	TestNo:	E150.1			Analysis Date:	12/28/2004	SeqNo:	657412
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
pH		7.110	2.00						7.100	0.141	10

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120578
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: S_TDS

Sample ID	MB-R54657	SampType:	MBLK	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653038
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		< 10		10							Qual
Sample ID	LCS-R54657	SampType:	LCS	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653043
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		992.0	10	1000	0	99.2	90	110			Qual
Sample ID	LCSD-R54657	SampType:	LCSD	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653044
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		1012	10	1000	0	101	90	110	992.0	2.00	10
Sample ID	04120624-07ADUP	SampType:	DUP	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653041
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		552.0	10						516.0	6.74	10

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

Aerotech Environmental Laboratories Sample Receipt Checklist

Project checked by: _____

Laboratory Number: 04-12-0578		Checklist completed by: <i>CC</i>
Client Name: Brown & Caldwell		Signature/Date 12-6-04
Matrix: AG	Carrier Name: SAR	Date/Time Rec'd: 12-6-04 13:26 By: TM

Temperature of Samples? 1.1 °C Circle one: Blue Ice Wet Ice Not Present

	Yes	No*	Not Present	Soil Containers:
Shipping container/cooler in good condition?	X			Brass Sleeve _____
Custody seals intact on shipping container/cooler?			X	Glass Jar _____
Custody seals intact on sample containers?			X	Methanol _____
Chain of Custody present and relinquished/received properly?	X			Plastic Bag _____
Chain of Custody agrees with sample labels?	X			Encore Samplers _____
Samples in proper containers/bottles?	X			
Sample containers intact?	X			
All samples received within holding time?	X			**See Comment about Chlorine and pH
Is there sufficient sample volume to perform the tests?	X			
40mL vials for volatiles & SOCs received with zero headspace?			X	

Total number of bottles received: 39 IH sample media:

If applicable, how many sample bottles were shipped from AEL-Tucson? N/A

Number of containers received by preservative and by sample number. (If more than 15 samples are rec'd, please continue on separate sheet(s))

Preservative	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A-General	1	(	1	1	1	1	1	(	1	(	1	1	1	1	
B-HNO3	1	(	1	1	1	1	1	(	1	1	1	1	1	1	
C-H2SO4	1	{	1	1	1	1	1	1	1	1	1	1	1	1	
D-HCl															
E-Na2S2O3															
F-NaOH															
G-Sulfide															
H-Na Sulfite															
I-MCAA															
J-Methanol															
K-HAA															
L-Other															

Water-pH acceptable upon receipt? Yes X No N/A

Preservative & pH	pH of samples upon receipt	If sample received with improper pH, list sample number and adjustments
Metals <2	<2	
Nutrients <2	<2	
Total Phenols <2		
413 (O&G) <2		
418 (TPH) <2		
Cyanide >12		
Sulfide >9		

*Any No response must be detailed in the comments section below. Contact the PM immediately to determine how to proceed.
Refer to SOP 11-001.04, Section 1.8.6. Continue on back if additional space is needed.

**The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.

Comments:

Corrective Action:



Aerotech Environmental Laboratories

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- Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
 - North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
 - Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
- www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

6578
04-12-0577

Customer Number:	Page <u>1</u> of <u>2</u>
Customer: Braun + Caldwell	Sampler: B. Sylvester
Address: 201 E Washington Suite 500	Project Name: Florence Cycles
City, State, Zip: Phoenix, AZ 85024	Project Number: 12
Contact: B. Sylvester	P.O. Number:
Phone: (602) 926-73894	Fax Results: Y N
E-Mail Address:	E-Mail Results: (Y) N
Sample Type Codes DW - Drinking Water A - Air WW - Waste Water S - Soil HW - Hazardous Waste Other _____	

Sample Receipt	Turn Around Request	Analyses Requested													
Temperature <u>71</u> °C	24 Hours <input checked="" type="checkbox"/> 48 Hours														
Custody Seals: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	72 Hours														
Custody Seals Intact: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5 Working Days														
Total # of Containers:	Standard 10 Working Days														
Subject to scheduling & availability (surcharges apply).															

Sample Information

Lab #	Sample Identification	Date	Time	Type													# of sample containers
O1	BHP-8	12/6/04	0750	AQ	✓	H H	H	H	H	H	H	H	H	H	H	Results.	3
O2	BHP-9		0810		✓	H H	H	H	H	H	H	H	H	H	H	"	1
O3	BHP-10		0830		✓	H H	H	H	H	H	H	H	H	H	H	"	1
O4	BHP-4		0850		✓	H H	H	H	H	H	H	H	H	H	H	Analyze per BHP S Q3 B12	
O5	BHP-3		0910		✓	H H	H	H	H	H	H	H	H	H	H	"	12/13/04
O6	BHP-7		0930		✓	H H	H	H	H	H	H	H	H	H	H	"	07/11
O7	BHP-10		0950		✓	H H	H	H	H	H	H	H	H	H	H	"	
O8	BHP-5		1010		✓	H H	H	H	H	H	H	H	H	H	H	"	
O9	BHP-6	✓	1020	✓	✓	H H	H	H	H	H	H	H	H	H	H	"	1
O10	BHP-2	12/6/04	1030	AQ	✓	H H	H	H	H	H	H	H	H	H	H	"	3

Instructions / Special Requirements: Invoice to: Vangard properties 975 Johnson Ferry Rd Suite 450 Atlanta, GA 30342

Date: 12/6/04	Time: 13210	Samples Relinquished By: B. Sylvester	Received By: Casey RAS



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- [] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6191
[] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

0578

Customer Number:	Page <u>2</u> of <u>2</u>	
Customer: <u>Brown + Caldwell</u>	Sampler:	Sample Type Codes
Address:	Project Name: <u>Florance Coker</u>	DW - Drinking Water A - Air
City, State, Zip:	Project Number:	WW - Waste Water S - Soil
Contact:	P.O. Number:	HW - Hazardous Waste
Phone:	Fax Results: Y N	Other _____
E-Mail Address:	E-Mail Results: Y N	

Instructions / Special Requirements:

Date:	Time:	Samples Relinquished By:	Received By:
12/6/04	1324	Bethany Gifford	Mary Weiss



Aerotech Environmental Laboratories

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Friday, January 21, 2005

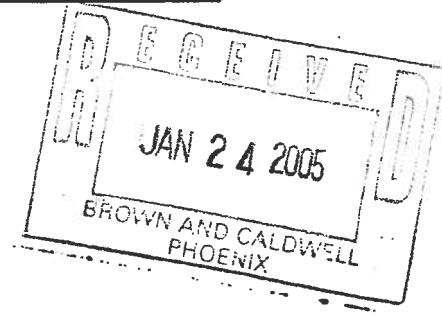
AMENDED 01/21/2005

Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004
TEL: (602) 567-4000
FAX: (602) 567-4001

RE: Florence Copper

Order No.: 04120624

Dear Barbara Sylvester:



This report was amended on 1/21/05 to add additional analyses.

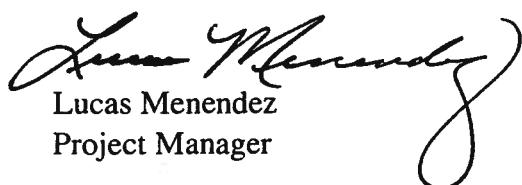
Aerotech Environmental received 12 sample(s) on 12/7/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,


Lucas Menendez
Project Manager



Aerotech Environmental Laboratories

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Wednesday, December 22, 2004

Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004

TEL: (602) 567-4000
FAX (602) 567-4001

RE: Florence Copper

Order No.: 04120624

Dear Barbara Sylvester:

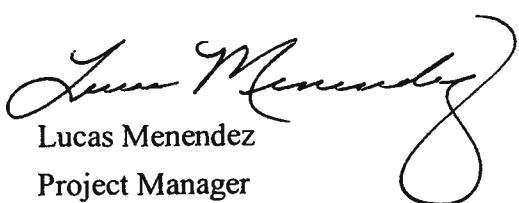
Aerotech Environmental received 12 sample(s) on 12/7/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,



Lucas Menendez
Project Manager



Aerotech Environmental Laboratories

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Aerotech Environmental

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 04120624

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

- B1 Target analyte detected in method blank at or above the method reporting limit.
- D2 Sample required dilution due to high concentration of target analyte.
- H1 Sample analysis performed past holding time.
- M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.



Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 04120624

CASE NARRATIVE

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

N1 See case narrative.

N1- Method 300 (Chloride & Sulfate):

The sample selected as the duplicate and matrix spike contained high concentrations of chloride and/or sulfate. The analyte concentration in the sample is disproportionate to the spike level and it was not practical to analyze the sample at a dilution, as the spike would be diluted out. The LCS/LCSD were recovered acceptably demonstrating that the analytical process was in control.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	BHP-1
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 7:40:00 AM
Lab ID:	04120624-01A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	110	10	D2	mg/L	5	12/9/2004 11:21:00 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	BHP-11
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 8:00:00 AM
Lab ID:	04120624-02A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	95	2.0		mg/L	1	12/8/2004 10:52:00 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	OWB-4
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 8:20:00 AM
Lab ID:	04120624-03A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	49	2.0		mg/L	1	12/8/2004 11:11:00 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

Page 3 of 14

- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	OWB-8
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 8:30:00 AM
Lab ID:	04120624-04A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	49	2.0		mg/L	1	12/8/2004 11:29:00 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	OWB-1
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 8:50:00 AM
Lab ID:	04120624-05A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	57	2.0		mg/L	1	12/8/2004 11:48:00 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	OWB-5
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 9:20:00 AM
Lab ID:	04120624-06A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	55	2.0		mg/L	1	12/8/2004 12:06:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120624
Project: Florence Copper
Lab ID: 04120624-07A

Client Sample ID: OWB-3
Tag Number:
Collection Date: 12/7/2004 9:50:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
				E300		Analyst: T S
Chloride	130	10	D2	mg/L	5	12/28/2004 4:46:00 PM
Fluoride	0.60	0.40		mg/L	1	12/8/2004 12:25:00 PM
Nitrogen, Nitrate (As N)	0.63	0.20		mg/L	1	12/8/2004 12:25:00 PM
Sulfate	76	2.0		mg/L	1	12/8/2004 12:25:00 PM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0	B1;H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Total (As CaCO ₃)	140	6.0	H1	mg/L CaCO ₃	1	12/29/2004
CATION/ANION BALANCE						
Cation/Anion Balance	8.77	0		% difference	1	1/6/2005
PH (3)						
pH	8.00	2.00	H1	pH units	1	12/28/2004 3:42:00 PM
RESIDUE, FILTERABLE						
Total Dissolved Solids	520	10		mg/L	1	12/14/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

Page 7 of 14

- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID: OWB-3				
Lab Order:	04120624	Tag Number:				
Project:	Florence Copper	Collection Date: 12/7/2004 9:50:00 AM				
Lab ID:	04120624-07B	Matrix: AQUEOUS				
Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7				Analyst: TD
Aluminum, Dissolved	< 0.20	0.20		mg/L	1	12/17/2004
Calcium, Dissolved	70	2.0		mg/L	1	12/17/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
Magnesium, Dissolved	14	2.0		mg/L	1	12/17/2004
Potassium, Dissolved	7.0	2.0		mg/L	1	12/17/2004
Sodium, Dissolved	97	2.0		mg/L	1	12/17/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
ICP/MS METALS, DISSOLVED		E200.8				Analyst: RF
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Arsenic, Dissolved	0.0015	0.0010		mg/L	1	1/3/2005
Barium, Dissolved	0.016	0.0010		mg/L	1	1/3/2005
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Chromium, Dissolved	0.0012	0.0010		mg/L	1	1/3/2005
Cobalt, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Copper, Dissolved	0.0083	0.0010		mg/L	1	1/3/2005
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Manganese, Dissolved	< 0.0025	0.0025		mg/L	1	1/3/2005
Nickel, Dissolved	0.0018	0.0010		mg/L	1	1/3/2005
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
DISSOLVED MERCURY IN WATERS		E245.1				Analyst: PC
Mercury, Dissolved	< 0.00020	0.00020		mg/L	1	12/30/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120624
Project: Florence Copper
Lab ID: 04120624-08A

Client Sample ID: OWB-9
Tag Number:
Collection Date: 12/7/2004 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
Chloride	130	10	D2	mg/L	5	12/28/2004 5:41:00 PM
Fluoride	0.60	0.40		mg/L	1	12/8/2004 12:43:00 PM
Nitrogen, Nitrate (As N)	0.63	0.20		mg/L	1	12/8/2004 12:43:00 PM
Sulfate	76	2.0		mg/L	1	12/8/2004 12:43:00 PM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0	B1;H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0	H1	mg/L CaCO ₃	1	12/29/2004
Alkalinity, Total (As CaCO ₃)	140	6.0	H1	mg/L CaCO ₃	1	12/29/2004
CATION/ANION BALANCE						
Cation/Anion Balance	9.95	0		% difference	1	1/6/2005
PH (3)						
pH	8.01	2.00	H1	pH units	1	12/28/2004 3:42:00 PM
RESIDUE, FILTERABLE						
Total Dissolved Solids	530	10		mg/L	1	12/14/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Lab Order: 04120624
Project: Florence Copper
Lab ID: 04120624-08B

Client Sample ID: OWB-9
Tag Number:
Collection Date: 12/7/2004 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED						
Aluminum, Dissolved	< 0.20	0.20		mg/L	1	12/17/2004
Calcium, Dissolved	71	2.0		mg/L	1	12/17/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
Magnesium, Dissolved	15	2.0		mg/L	1	12/17/2004
Potassium, Dissolved	7.0	2.0		mg/L	1	12/17/2004
Sodium, Dissolved	99	2.0		mg/L	1	12/17/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	12/17/2004
ICP/MS METALS, DISSOLVED						
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Arsenic, Dissolved	0.0014	0.0010		mg/L	1	1/3/2005
Barium, Dissolved	0.015	0.0010		mg/L	1	1/3/2005
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Chromium, Dissolved	0.0013	0.0010		mg/L	1	1/3/2005
Cobalt, Dissolved	0.0022	0.0010		mg/L	1	1/3/2005
Copper, Dissolved	0.0079	0.0010		mg/L	1	1/3/2005
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Manganese, Dissolved	0.0038	0.0025		mg/L	1	1/3/2005
Nickel, Dissolved	0.0020	0.0010		mg/L	1	1/3/2005
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/3/2005
DISSOLVED MERCURY IN WATERS						
Mercury, Dissolved	< 0.00020	0.00020		mg/L	1	12/30/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	CH1-R
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 10:15:00 AM
Lab ID:	04120624-09A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	300	20	D2	mg/L	10	12/8/2004 4:07:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	CH1-B
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 10:30:00 AM
Lab ID:	04120624-10A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	98	10	D2	mg/L	5	12/8/2004 4:25:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	CH2-R
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 10:40:00 AM
Lab ID:	04120624-11A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	86	2.0		mg/L	1	12/8/2004 2:34:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 21-Jan-05

CLIENT:	Brown & Caldwell	Client Sample ID:	CH2-B
Lab Order:	04120624	Tag Number:	
Project:	Florence Copper	Collection Date:	12/7/2004 10:45:00 AM
Lab ID:	04120624-12A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: T S
Sulfate	90	2.0		mg/L	1	12/8/2004 3:30:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

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- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental

Date: 21-Jan-05

CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID: MB-19992	SampType: MBLK	TestCode: 200.7_DISS		Units: mg/L	Prep Date: 12/16/2004		RunNo: 54722				
Client ID:	Batch ID: 19992	TestNo: E200.7			Analysis Date: 12/17/2004		SeqNo: 653715				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved	< 0.20	0.20									
Calcium, Dissolved	< 2.0	2.0									
Iron, Dissolved	< 0.050	0.050									
Magnesium, Dissolved	< 2.0	2.0									
Potassium, Dissolved	< 2.0	2.0									
Sodium, Dissolved	< 2.0	2.0									
Sample ID: MB-19992	SampType: MBLK	TestCode: 200.7_DISS		Units: mg/L	Prep Date: 12/16/2004		RunNo: 54722				
Client ID:	Batch ID: 19992	TestNo: E200.7			Analysis Date: 12/21/2004		SeqNo: 655368				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc, Dissolved	< 0.050	0.050									
Sample ID: LCS-19992	SampType: LCS	TestCode: 200.7_DISS		Units: mg/L	Prep Date: 12/16/2004		RunNo: 54722				
Client ID:	Batch ID: 19992	TestNo: E200.7			Analysis Date: 12/17/2004		SeqNo: 653713				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved	0.9800	0.20	1	0	98.0	85	115				
Calcium, Dissolved	10.50	2.0	10.5	0	100	85	115				
Iron, Dissolved	0.5070	0.050	0.5	0	101	85	115				
Magnesium, Dissolved	10.50	2.0	10.5	0	100	85	115				
Potassium, Dissolved	10.30	2.0	10	0	103	85	115				
Sodium, Dissolved	9.900	2.0	10	0	99.0	85	115				

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	LCS-19992	SampType:	LCS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/21/2004	SeqNo:	655369
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Zinc, Dissolved		0.4950	0.050	0.5	0	99.0	85	115			
Sample ID	LCSD-19992	SampType:	LCSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653714
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.020	0.20	1	0	102	85	115	0.9800	4.00	20
Calcium, Dissolved		10.60	2.0	10.5	0	101	85	115	10.50	0.948	20
Iron, Dissolved		0.5200	0.050	0.5	0	104	85	115	0.5070	2.53	20
Magnesium, Dissolved		10.80	2.0	10.5	0	103	85	115	10.50	2.82	20
Potassium, Dissolved		10.40	2.0	10	0	104	85	115	10.30	0.966	20
Sodium, Dissolved		10.20	2.0	10	0	102	85	115	9.900	2.99	20
Sample ID	LCSD-19992	SampType:	LCSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/21/2004	SeqNo:	655370
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Zinc, Dissolved		0.4920	0.050	0.5	0	98.4	85	115	0.4950	0.608	20
Sample ID	04120697-02B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653711
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131			
Calcium, Dissolved		382.0	2.0	10.5	371.0	105	70	130			
Iron, Dissolved		0.4810	0.050	0.5	0	96.2	84.7	117			
Magnesium, Dissolved		57.20	2.0	10.5	47.40	93.3	79	121			
Potassium, Dissolved		23.60	2.0	10	7.860	157	70	130			M6

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	04120697-02B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653711
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sodium, Dissolved		96.00	2.0	10	82.30	137	70	130			M6
Sample ID	04120697-06B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	654154
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131			
Calcium, Dissolved		378.0	2.0	10.5	363.0	143	70	130			M6
Iron, Dissolved		0.4640	0.050	0.5	0	92.8	84.7	117			
Magnesium, Dissolved		57.90	2.0	10.5	47.70	97.1	79	121			
Potassium, Dissolved		23.30	2.0	10	7.750	156	70	130			M6
Sodium, Dissolved		97.20	2.0	10	81.20	160	70	130			M6
Zinc, Dissolved		0.5340	0.050	0.5	0	107	88.1	117			
Sample ID	04120697-02B MSD	SampType:	MSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722
Client ID:		Batch ID:	19992	TestNo:	E200.7			Analysis Date:	12/17/2004	SeqNo:	653712
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131	1.080	0	9.98
Calcium, Dissolved		377.0	2.0	10.5	371.0	57.1	63.1	131	382.0	1.32	5.57
Iron, Dissolved		0.4800	0.050	0.5	0	96.0	84.7	117	0.4810	0.208	6.3
Magnesium, Dissolved		57.80	2.0	10.5	47.40	99.0	79	121	57.20	1.04	4.55
Potassium, Dissolved		23.80	2.0	10	7.860	159	70	130	23.60	0.844	5.29
Sodium, Dissolved		98.10	2.0	10	82.30	158	70	130	96.00	2.16	7.28

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	04120697-06B MSD	SampType:	MSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	12/16/2004	RunNo:	54722	
Client ID:		Batch ID:	19992	TestNo: E200.7			Analysis Date: 12/17/2004			SeqNo:	654155	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved		1.080	0.20	1	0	108	86.8	131	1.080	0	9.98	
Calcium, Dissolved		377.0	2.0	10.5	363.0	133	63.1	131	378.0	0.265	5.57	M6
Iron, Dissolved		0.4640	0.050	0.5	0	92.8	84.7	117	0.4640	0	6.3	
Magnesium, Dissolved		56.80	2.0	10.5	47.70	86.7	79	121	57.90	1.92	4.55	
Potassium, Dissolved		23.20	2.0	10	7.750	154	70	130	23.30	0.430	5.29	M6
Sodium, Dissolved		95.20	2.0	10	81.20	140	70	130	97.20	2.08	7.28	M6
Zinc, Dissolved		0.5310	0.050	0.5	0	106	88.1	117	0.5340	0.563	5.13	

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT**TestCode: 200.8_DISS**

Sample ID	MB-20120	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658599
Analyte											

Antimony, Dissolved	< 0.0010	0.0010
Arsenic, Dissolved	< 0.0010	0.0010
Barium, Dissolved	< 0.0010	0.0010
Beryllium, Dissolved	< 0.0010	0.0010
Cadmium, Dissolved	< 0.0010	0.0010
Chromium, Dissolved	< 0.0010	0.0010
Cobalt, Dissolved	< 0.0010	0.0010
Copper, Dissolved	< 0.0010	0.0010
Lead, Dissolved	< 0.0010	0.0010
Manganese, Dissolved	< 0.0050	0.0050
Nickel, Dissolved	< 0.0010	0.0010
Selenium, Dissolved	< 0.0010	0.0010
Thallium, Dissolved	< 0.0010	0.0010

Sample ID	LCS-20120	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658600
Analyte											

Antimony, Dissolved	0.1051	0.0010	0.1	0	105	85	115
Arsenic, Dissolved	0.1077	0.0010	0.1	0	108	85	115
Barium, Dissolved	0.1055	0.0010	0.1	0	106	85	115
Beryllium, Dissolved	0.1064	0.0010	0.1	0	106	85	115
Cadmium, Dissolved	0.1047	0.0010	0.1	0	105	85	115
Chromium, Dissolved	0.1009	0.0010	0.1	0	101	85	115
Cobalt, Dissolved	0.1017	0.0010	0.1	0	102	85	115
Copper, Dissolved	0.09951	0.0010	0.1	0	99.5	85	115
Lead, Dissolved	0.1007	0.0010	0.1	0	101	85	115
Manganese, Dissolved	0.1022	0.0050	0.1	0	102	85	115
Nickel, Dissolved	0.1005	0.0010	0.1	0	101	85	115

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	LCS-20120	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658600	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Selenium, Dissolved	0.1095	0.0010	0.1	0	109	85	115				
Thallium, Dissolved	0.1042	0.0010	0.1	0	104	85	115				

Sample ID	LCSD-20120	SampType:	LCSD	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658610	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	0.1043	0.0010	0.1	0	104	85	115	0.1051	0.745	20	
Arsenic, Dissolved	0.1062	0.0010	0.1	0	106	85	115	0.1077	1.43	20	
Barium, Dissolved	0.1056	0.0010	0.1	0	106	85	115	0.1055	0.0758	20	
Beryllium, Dissolved	0.1061	0.0010	0.1	0	106	85	115	0.1064	0.227	20	
Cadmium, Dissolved	0.1047	0.0010	0.1	0	105	85	115	0.1047	0.0105	20	
Chromium, Dissolved	0.09924	0.0010	0.1	0	99.2	85	115	0.1009	1.67	20	
Cobalt, Dissolved	0.1005	0.0010	0.1	0	100	85	115	0.1017	1.27	20	
Copper, Dissolved	0.09906	0.0010	0.1	0	99.1	85	115	0.09951	0.456	20	
Lead, Dissolved	0.1011	0.0010	0.1	0	101	85	115	0.1007	0.408	20	
Manganese, Dissolved	0.1013	0.0050	0.1	0	101	85	115	0.1022	0.877	20	
Nickel, Dissolved	0.09952	0.0010	0.1	0	99.5	85	115	0.1005	0.981	20	
Selenium, Dissolved	0.1104	0.0010	0.1	0	110	85	115	0.1095	0.823	20	
Thallium, Dissolved	0.1041	0.0010	0.1	0	104	85	115	0.1042	0.139	20	

Sample ID	04120578-04B MS	SampType:	MS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128	
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658602	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	0.08708	0.0010	0.1	0	87.1	75.9	121				
Arsenic, Dissolved	0.1008	0.0010	0.1	0.001667	99.1	76.1	124				
Barium, Dissolved	0.1087	0.0010	0.1	0.01861	90.1	76.3	115				
Beryllium, Dissolved	0.09860	0.0010	0.1	0	98.6	70	130				

Qualifiers:	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded				J	Analyte detected below quantitation limits		
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits				S	Spike Recovery outside accepted recovery limits		



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	04120578-04B MS	SampType:	MS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658602
Analyte											
Cadmium, Dissolved	0.08252	PQL	0.0010	SPK value	0.1	SPK Ref Val	0	%REC	82.5	LowLimit	74.9
Chromium, Dissolved	0.09833		0.0010		0.1		0		98.3	HighLimit	112
Cobalt, Dissolved	0.09544		0.0010		0.1	0.003494			92.0	70	130
Copper, Dissolved	0.2834		0.0010		0.1	0.2174			66.0	74	119
Lead, Dissolved	0.09390		0.0010		0.1		0		93.9	70.6	130
Manganese, Dissolved	0.1131		0.0050		0.1	0.01362			99.5	72.9	127
Nickel, Dissolved	0.09442		0.0010		0.1	0.007203			87.2	74.5	111
Selenium, Dissolved	0.09808		0.0010		0.1		0		98.1	74.6	121
Thallium, Dissolved	0.09699		0.0010		0.1		0		97.0	70.7	121

Sample ID	04120578-04B MSD	SampType:	MSD	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	12/30/2004	RunNo:	55128
Client ID:		Batch ID:	20120	TestNo:	E200.8			Analysis Date:	1/3/2005	SeqNo:	658603
Analyte											
Antimony, Dissolved	0.08716	PQL	0.0010	SPK value	0.1	SPK Ref Val	0	%REC	87.2	75.9	121
Arsenic, Dissolved	0.09951		0.0010		0.1	0.001667			97.8	76.1	124
Barium, Dissolved	0.1091		0.0010		0.1	0.01861			90.5	76.3	115
Beryllium, Dissolved	0.09941		0.0010		0.1		0		99.4	70	130
Cadmium, Dissolved	0.08184		0.0010		0.1	0.003494			81.8	74.9	112
Chromium, Dissolved	0.09660		0.0010		0.1	0.01362			96.6	70	130
Cobalt, Dissolved	0.09386		0.0010		0.1	0.007203			90.4	74	119
Copper, Dissolved	0.2748		0.0010		0.1	0.2174			57.4	70	130
Lead, Dissolved	0.09311		0.0010		0.1		0		93.1	70.6	119
Manganese, Dissolved	0.1099		0.0050		0.1	0.01362			96.3	72.9	127
Nickel, Dissolved	0.09318		0.0010		0.1	0.007203			86.0	74.5	111
Selenium, Dissolved	0.09701		0.0010		0.1		0		97.0	74.6	121
Thallium, Dissolved	0.09732		0.0010		0.1		0		97.3	70.7	121

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_DISS

Sample ID	MB-20098	SampType:	MBLK	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:		Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657962	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved		< 0.00020	0.00020									
Sample ID	LCS-20098	SampType:	LCS	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:		Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657963	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved		0.005100	0.00020	0.005	0	102	85	115				
Sample ID	LCSD-20098	SampType:	LCSD	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	<th>Batch ID:</th> <td>20098</td> <th>TestNo:</th> <td>E245.1</td> <th></th> <th></th> <th>Analysis Date:</th> <td>12/30/2004</td> <th>SeqNo:</th> <td>657964</td>	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657964	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved		0.005110	0.00020	0.005	0	102	85	115	0.005100	0.196	20	
Sample ID	04120578-04BMS	SampType:	MS	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	<th>Batch ID:</th> <td>20098</td> <th>TestNo:</th> <td>E245.1</td> <th></th> <th></th> <th>Analysis Date:</th> <td>12/30/2004</td> <th>SeqNo:</th> <td>657966</td>	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657966	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved		0.005000	0.00020	0.005	0	100	70	130				
Sample ID	04120578-04BMSD	SampType:	MSD	TestCode:	245.1_W_DIS	Units:	mg/L	Prep Date:	12/29/2004	RunNo:	55074	
Client ID:	<th>Batch ID:</th> <td>20098</td> <th>TestNo:</th> <td>E245.1</td> <th></th> <th></th> <th>Analysis Date:</th> <td>12/30/2004</td> <th>SeqNo:</th> <td>657967</td>	Batch ID:	20098	TestNo:	E245.1			Analysis Date:	12/30/2004	SeqNo:	657967	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury, Dissolved		0.005110	0.00020	0.005	0	102	70	130	0.005000	2.18	20	

Qualifiers:	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded				J	Analyte detected below quantitation limits			
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits				S	Spike Recovery outside accepted recovery limits			



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	MB-R54400	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54400		
Client ID:		Batch ID:	R54400	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650236		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0	2.0										
Fluoride		< 0.40	0.40										
Nitrogen, Nitrate (As N)		< 0.20	0.20										
Sulfate		< 2.0	2.0										
Sample ID	MB-R54404	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54404		
Client ID:		Batch ID:	R54404	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650278		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		< 2.0	2.0										
Sample ID	MB-R54447	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54447		
Client ID:		Batch ID:	R54447	TestNo:	E300			Analysis Date:	12/9/2004	SeqNo:	650713		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		< 2.0	2.0										
Sample ID	MB-R54997	SampType:	MBLK	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54997		
Client ID:		Batch ID:	R54997	TestNo:	E300			Analysis Date:	12/28/2004	SeqNo:	656880		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0	2.0										
Sample ID	LCS-R54400	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54400		
Client ID:		Batch ID:	R54400	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650237		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		19.84	2.0	20	0	99.2	90	110					N1

Qualifiers:	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded				J	Analyte detected below quantitation limits			
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits				S	Spike Recovery outside accepted recovery limits			



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	LCS-R54400	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54400		
Client ID:	<th>Batch ID:</th> <td>R54400<th>TestNo:</th><td>E300</td><td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td data-cs="3" data-kind="parent">SeqNo: 650237</td><td data-kind="ghost"></td><td data-kind="ghost"></td></td>	Batch ID:	R54400 <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td data-cs="3" data-kind="parent">SeqNo: 650237</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	TestNo:	E300			Analysis Date: 12/8/2004			SeqNo: 650237		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Fluoride		4.183	0.40	4	0	105	90	110					
Nitrogen, Nitrate (As N)		4.051	0.20	4	0	101	90	110					
Sulfate		20.25	2.0	20	0	101	90	110					
Sample ID	LCS-R54404	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54404		
Client ID:	<th>Batch ID:</th> <td>R54404<th>TestNo:</th><td>E300</td><td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td data-cs="3" data-kind="parent">SeqNo: 650279</td><td data-kind="ghost"></td><td data-kind="ghost"></td></td>	Batch ID:	R54404 <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td data-cs="3" data-kind="parent">SeqNo: 650279</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	TestNo:	E300			Analysis Date: 12/8/2004			SeqNo: 650279		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate		20.30	2.0	20	0	101	90	110				N1	
Sample ID	LCS-R54447	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54447		
Client ID:	<th>Batch ID:</th> <td>R54447<th>TestNo:</th><td>E300</td><td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date: 12/9/2004</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td data-cs="3" data-kind="parent">SeqNo: 650714</td><td data-kind="ghost"></td><td data-kind="ghost"></td></td>	Batch ID:	R54447 <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date: 12/9/2004</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td data-cs="3" data-kind="parent">SeqNo: 650714</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	TestNo:	E300			Analysis Date: 12/9/2004			SeqNo: 650714		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate		20.27	2.0	20	0	101	90	110					
Sample ID	LCS-R54997	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54997		
Client ID:	<th>Batch ID:</th> <td>R54997</td> <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date: 12/28/2004</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td data-cs="3" data-kind="parent">SeqNo: 656881</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	Batch ID:	R54997	TestNo:	E300			Analysis Date: 12/28/2004			SeqNo: 656881		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Chloride		20.46	2.0	20	0	102	90	110					
Sample ID	LCSD-R54400	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:			RunNo: 54400		
Client ID:	<th>Batch ID:</th> <td>R54400<th>TestNo:</th><td>E300</td><td></td><td></td><th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th><th data-kind="ghost"></th><th data-kind="ghost"></th><td data-cs="3" data-kind="parent">SeqNo: 650250</td><td data-kind="ghost"></td><td data-kind="ghost"></td></td>	Batch ID:	R54400 <th>TestNo:</th> <td>E300</td> <td></td> <td></td> <th data-cs="3" data-kind="parent">Analysis Date: 12/8/2004</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <td data-cs="3" data-kind="parent">SeqNo: 650250</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	TestNo:	E300			Analysis Date: 12/8/2004			SeqNo: 650250		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Chloride		19.83	2.0	20	0	99.2	90	110	19.84	0.0605	20	N1	
Fluoride		4.186	0.40	4	0	105	90	110	4.183	0.0717	20		

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	LCSD-R54400	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54400
Client ID:		Batch ID:	R54400	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650250
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Nitrate (As N)		3.976	0.20	4	0	99.4	90	110	4.051	1.87	20
Sulfate		20.25	2.0	20	0	101	90	110	20.25	0.00494	20
Sample ID	LCSD-R54404	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54404
Client ID:		Batch ID:	R54404	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650287
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sulfate		20.25	2.0	20	0	101	90	110	20.30	0.217	20
Sample ID	LCSD-R54447	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54447
Client ID:		Batch ID:	R54447	TestNo:	E300			Analysis Date:	12/9/2004	SeqNo:	650718
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sulfate		20.30	2.0	20	0	102	90	110	20.27	0.143	20
Sample ID	LCSD-R54997	SampType:	LCSD	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54997
Client ID:		Batch ID:	R54997	TestNo:	E300			Analysis Date:	12/28/2004	SeqNo:	656886
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride		20.40	2.0	20	0	102	90	110	20.46	0.284	20
Sample ID	04120624-01AMS	SampType:	MS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54400
Client ID:	BHP-1	Batch ID:	R54400	TestNo:	E300			Analysis Date:	12/8/2004	SeqNo:	650240
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Fluoride		4.972	0.40	4	0.9660	100	80	120			
Nitrogen, Nitrate (As N)		4.478	0.20	4	0.8130	91.6	80	120			

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Main Laboratory: 4645 E. Cotton Center Boulevard, Building 3, Suite 189 Phoenix, AZ 85040 Phone: 602.437.3340 Toll Free: 866.772.5227 Fax: 623.445.6192 www.aeroenvirolabs.com

Tucson Facility: 4455 S. Park Ave. Ste. 110 Tucson, AZ 85714 Phone: 520.807.3801 Fax: 520.807.3803

Corporate Address: 1501 W. Knudsen Drive, Phoenix, AZ 85027 Ph: 602.780.4000 Tl: 866.772.5227 Fax: 602.780.7605 www.aerotechlabs.com



Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	04120624-01AMS	SampType:	MS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54447	
Client ID:	BHP-1	Batch ID:	R54447	TestNo:	E300				Analysis Date:	12/9/2004	SeqNo:	650717
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		224.2	10	100	114.4	110	80	120				
Sample ID	04120624-07AMS	SampType:	MS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54997	
Client ID:	OWB-3 <th>Batch ID:</th> <td>R54997</td> <th>TestNo:</th> <td>E300</td> <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Analysis Date:</th> <td>12/28/2004</td> <th>SeqNo:</th> <td>656884</td>	Batch ID:	R54997	TestNo:	E300				Analysis Date:	12/28/2004	SeqNo:	656884
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		229.9	10	20	126.4	517	80	120				M6
Sample ID	04120624-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54400	
Client ID:	BHP-1 <th>Batch ID:</th> <td>R54400</td> <th>TestNo:</th> <td>E300<th data-cs="3" data-kind="parent"></th><th data-kind="ghost"></th><th data-kind="ghost"></th><th>Analysis Date:</th><td>12/8/2004</td><th>SeqNo:</th><td>650239</td></td>	Batch ID:	R54400	TestNo:	E300 <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Analysis Date:</th> <td>12/8/2004</td> <th>SeqNo:</th> <td>650239</td>				Analysis Date:	12/8/2004	SeqNo:	650239
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		0.9660	0.40						0.9660	0	20	
Nitrogen, Nitrate (As N)		0.8040	0.20						0.8130	1.11	20	
Sample ID	04120624-11ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54404	
Client ID:	CH2-R	Batch ID:	R54404	TestNo:	E300 <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Analysis Date:</th> <td>12/8/2004</td> <th>SeqNo:</th> <td>650284</td>				Analysis Date:	12/8/2004	SeqNo:	650284
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		86.19	2.0						86.28	0.0997	20	
Sample ID	04120624-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54447	
Client ID:	BHP-1	Batch ID:	R54447	TestNo:	E300 <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Analysis Date:</th> <td>12/9/2004</td> <th>SeqNo:</th> <td>650716</td>				Analysis Date:	12/9/2004	SeqNo:	650716
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		114.5	10						114.4	0.00874	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT**TestCode: 300_W**

Sample ID	04120624-07ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	54997
Client ID:	OWB-3	Batch ID:	R54997	TestNo:	E300			Analysis Date:	12/28/2004	SeqNo:	656883
<hr/>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	127.1	10						126.4	0.532	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

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R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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■ Main Laboratory: 4645 E. Cotton Center Boulevard, Building 3, Suite 189 Phoenix, AZ 85040 Phone: 602.437.3340 Toll Free: 866.772.5227 Fax: 623.445.6192 www.aeroenvirolabs.com

■ Tucson Facility: 4455 S. Park Ave. Ste. 110 Tucson, AZ 85714 Phone: 520.807.3801 Fax: 520.807.3803

■ Corporate Address: 1501 W Knudsen Drive Phoenix, Arizona 85027 Phone: 623.780.4800 Toll Free: 800.661.4802 Fax: 623.780.7605 www.aerotechlabs.com



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: ALKALINITY

Sample ID	MB-R55031	SampType:	MBLK	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657359
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
Alkalinity, Bicarbonate (As CaCO ₃)	2.000	2.0									B1
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0									
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0									
Alkalinity, Total (As CaCO ₃)	< 6.0	6.0									
Sample ID	LCS-R55031	SampType:	LCS	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657360
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
Alkalinity, Total (As CaCO ₃)	254.0	6.0	250	0	102	90	110				
Sample ID	04120174-01ADUP	SampType:	DUP	TestCode:	ALKALINITY	Units:	mg/L CaCO ₃	Prep Date:		RunNo:	55031
Client ID:		Batch ID:	R55031	TestNo:	M2320 B			Analysis Date:	12/29/2004	SeqNo:	657362
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
Alkalinity, Bicarbonate (As CaCO ₃)	126.0	2.0						126.0		0	20
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0						0		0	20
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0						0		0	20
Alkalinity, Total (As CaCO ₃)	126.0	6.0						126.0		0	20

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: PH_W

Sample ID	LCS-R55011	SampType:	LCS	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011	
Client ID:		Batch ID:	R55011	TestNo:	E150.1 <td></td> <td></td> <th>Analysis Date:</th> <td>12/28/2004</td> <th>SeqNo:</th> <td>657075</td>			Analysis Date:	12/28/2004	SeqNo:	657075	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH		7.010	2.00	7	0	100	99.28	100.72				
Sample ID	LCSD-R55011	SampType:	LCSD	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011	
Client ID:	<th>Batch ID:</th> <td>R55011</td> <th>TestNo:</th> <td>E150.1<td></td><td></td><th>Analysis Date:</th><td>12/28/2004</td><th>SeqNo:</th><td>657079</td></td>	Batch ID:	R55011	TestNo:	E150.1 <td></td> <td></td> <th>Analysis Date:</th> <td>12/28/2004</td> <th>SeqNo:</th> <td>657079</td>			Analysis Date:	12/28/2004	SeqNo:	657079	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH		7.000	2.00	7	0	100	99.28	100.72	7.010	0.143	10	
Sample ID	04121383-04ADUP	SampType:	DUP	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	55011	
Client ID:	<th>Batch ID:</th> <td>R55011</td> <th>TestNo:</th> <td>E150.1<td></td><td></td><th>Analysis Date:</th><td>12/28/2004</td><th>SeqNo:</th><td>657412</td></td>	Batch ID:	R55011	TestNo:	E150.1 <td></td> <td></td> <th>Analysis Date:</th> <td>12/28/2004</td> <th>SeqNo:</th> <td>657412</td>			Analysis Date:	12/28/2004	SeqNo:	657412	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH		7.110	2.00						7.100	0.141	10	

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



CLIENT: Brown & Caldwell
Work Order: 04120624
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: S_TDS

Sample ID	MB-R54657	SampType:	MBLK	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653038
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		< 10		10							Qual
Sample ID	LCS-R54657	SampType:	LCS	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653043
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		992.0	10	1000	0	99.2	90	110			Qual
Sample ID	LCSD-R54657	SampType:	LCSD	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:		Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653044
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		1012	10	1000	0	101	90	110	992.0	2.00	10
Sample ID	04120624-07ADUP	SampType:	DUP	TestCode:	S_TDS	Units:	mg/L	Prep Date:		RunNo:	54657
Client ID:	OWB-3	Batch ID:	R54657	TestNo:	M2540 C			Analysis Date:	12/14/2004	SeqNo:	653041
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Total Dissolved Solids		552.0	10						516.0	6.74	10

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

Aerotech Environmental Laboratories Sample Receipt Checklist

Project checked by: *DMG*

Laboratory Number: <i>04-12-0624</i>	Checklist completed by: <i>Tracy D 12-7-04</i>
Client Name: <i>Brown & Caldwell</i>	Signature/Date
Matrix: <i>AD</i>	Carrier Name: <i>Barb</i>
	Date/Time Rec'd: <i>12-7-04 1237</i> By: <i>T</i>

Temperature of Samples? *1.4* °C Circle one: Blue Ice Wet Ice Not Present

Yes No* Not Present

Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Custody seals intact on shipping container/cooler?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody seals intact on sample containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chain of Custody present and relinquished/received properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chain of Custody agrees with sample labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples in proper containers/bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample containers intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there sufficient sample volume to perform the tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40mL vials for volatiles & SOCs received with zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Soil Containers:

Brass Sleeve _____

Glass Jar _____

Methanol _____

Plastic Bag _____

Encore Samplers _____

**See Comment about Chlorine and pH

Total number of bottles received: <i>36</i>	IH sample media:
If applicable, how many sample bottles were shipped from AEL-Tucson?	<i>N/A</i> <input checked="" type="checkbox"/>

Number of containers received by preservative and by sample number: (If more than 15 samples are rec'd, please continue on separate sheet(s))

Preservative	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A-General	<input checked="" type="checkbox"/>	<input type="checkbox"/>													
B-HNO3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C-H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D-HCl															
E-Na2S2O3															
F-NaOH															
G-Sulfide															
H-Na Sulfite															
I-MCAA															
J-Methanol															
K-HAA															
L-Other															

Water-pH acceptable upon receipt? Yes No N/A

Preservative & pH	pH of samples upon receipt	If sample received with improper pH, list sample number and adjustments
Metals <2	<i><2</i>	
Nutrients <2	<i><2</i>	
Total Phenols <2		
413 (O&G) <2		
418 (TPH) <2		
Cyanide >12		
Sulfide >9		

*Any No response must be detailed in the comments section below. Contact the PM immediately to determine how to proceed.
Refer to SOP 11-001.04, Section 1.8.6. Continue on back if additional space is needed.

**The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.

Comments:

Corrective Action:



Aerotech Environmental Laboratories

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Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192

North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216

Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803

www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

04-12-0624

Customer Number:		Page <u>1</u> of <u>2</u>			
Customer: <u>Brown & Caldwell</u>		Sampler: <u>B. Sylvester</u>		Sample Type Codes	
Address: <u>361 E Washington Suite B-02</u>		Project Name: <u>Florence Copper</u>		DW - Drinking Water	A - Air
City, State, Zip: <u>Phoenix AZ 85004</u>		Project Number:		WW - Waste Water	S - Soil
Contact: <u>Brian Sylvester</u>		P.O. Number:		HW - Hazardous Waste	
Phone: <u>(602) 967-3894</u>		Fax Results: <u>Y</u> <u>N</u>		Other _____	
E-Mail Address:		E-Mail Results: <u>Y</u> <u>N</u>			
Sample Receipt		Turn Around Request		Analyses Requested	
Temperature <u>14</u> °C		24 Hours <input checked="" type="checkbox"/>	48 Hours <input type="checkbox"/>		
Custody Seals: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	72 Hours <input type="checkbox"/>			
Custody Seals Intact: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	5 Working Days <input type="checkbox"/>			
Total # of Containers:		Standard 10 Working Days <input type="checkbox"/>			
Subject to scheduling & availability (surcharges apply).					

Sample Information

Lab #	Sample Identification	Date	Time	Type	# of sample containers	
01	BHP-1	12/7/04	0740	AQ	✓	H H
02	BHP-11		0800		✓	H H
03	OWB-4		0820		✓	H H
04	OWB-5		0830		✓	H H
05	OWB-1		0850		✓	H H
06	OWB-6		0920		✓	H H
07	OWB-3		0950		✓	X X ? Analyze per Bar 50 BHP
08	OWB-9		1000		✓	X X ? Analyze per Bar 50 BHP
09	CHI-R		1015		✓	H H
10	CHI-B	12/7/04	1030	AQ	✓	H H

Instructions / Special Requirements:

Townie 16: Voyager Properties 975 Johnson Ferry Rd. Suite 450
Atlanta GA 30342

Date:	Time:	Samples Relinquished By:	Received By:
12-7-04	1235	J. Sylvester	Wacey



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- [] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.619
[] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

04-12-06 Z

Customer Number:	Page <u>2</u> of <u>2</u>	Sample Type Codes
Customer: <u>Brown & Caldwell</u>	Sampler: <u>B. Silverter</u>	DW - Drinking Water A - Air
Address:	Project Name: <u>Florence Cooper</u>	WW - Waste Water S - Soil
City, State, Zip:	Project Number:	HW - Hazardous Waste
Contact:	P.O. Number:	Other _____
Phone: _____	Fax Results: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
E-Mail Address: _____	E-Mail Results: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

Sample Information

Instructions / Special Requirements:

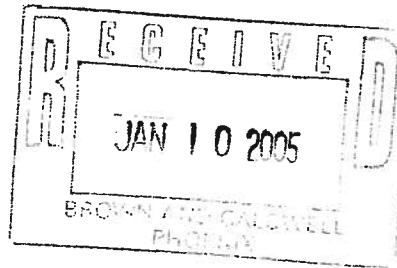
Date:	Time:	Samples Relinquished By:	Received By:
17-7-04	1237	<i>John G. W.</i>	<i>Tracy M. S.</i>



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Thursday, December 30, 2004



Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004

TEL: (602) 567-4000
FAX (602) 567-4001

RE: Florence Copper

Order No.: 04121262

Dear Barbara Sylvester:

Aerotech Environmental received 1 sample(s) on 12/22/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Lucas Menendez
Project Manager



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Date: 05-Jan-05

CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 04121262

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.

D2 Sample required dilution due to high concentration of target analyte.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 30-Dec-04

CLIENT:	Brown & Caldwell	Client Sample ID:	OWB 2
Lab Order:	04121262	Tag Number:	
Project:	Florence Copper	Collection Date:	12/21/2004 5:10:00 PM
Lab ID:	04121262-01A	Matrix:	DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY Sulfate	160	E300 10	D2	mg/L	5	Analyst: T S 12/27/2004 5:54:00 PM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory

Page 1 of 1

- (3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental

Date: 30-Dec-04

CLIENT: Brown & Caldwell
Work Order: 04121262
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID: MB-R55010	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 55010
Client ID:	Batch ID: R55010	TestNo: E300		Analysis Date: 12/27/2004	SeqNo: 657068
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 2.0	2.0			
Sample ID: LCS-R55010	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 55010
Client ID:	Batch ID: R55010	TestNo: E300		Analysis Date: 12/27/2004	SeqNo: 657069
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	20.38	2.0	20	0	102 90 110
Sample ID: LCSD-R55010	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 55010
Client ID:	Batch ID: R55010	TestNo: E300		Analysis Date: 12/27/2004	SeqNo: 657074
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	20.39	2.0	20	0	102 90 110 20.38 0.0540 20
Sample ID: 04121345-01AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 55010
Client ID:	Batch ID: R55010	TestNo: E300		Analysis Date: 12/27/2004	SeqNo: 657073
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	88.48	2.0	20	68.68	99.0 80 120
Sample ID: 04121345-01ADUP	SampType: DUP	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 55010
Client ID:	Batch ID: R55010	TestNo: E300		Analysis Date: 12/27/2004	SeqNo: 657072
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	68.76	2.0			68.68 0.125 20

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Laboratory Number: <i>04-12-1262</i>	Checklist completed by: <i>CD</i> 12-22-04	
Client Name: <i>Brown & Caldwell</i>	Signature/Date	
Matrix: <i>DW</i>	Carrier Name:	Date/Time Rec'd: 12-22-04 11:30 By: CMC

Temperature of Samples? *26 °C* Circle one: Blue Ice Wet Ice Not Present

Soil Containers:

Brass Sleeve _____

Glass Jar _____

Methanol _____

Plastic Bag _____

Encore Samplers _____

Shipping container/coolier in good condition?	Yes	No*	Not Present
Custody seals intact on shipping container/coolier?		X	
Custody seals intact on sample containers?		X	
Chain of Custody present and relinquished/received properly?	X		
Chain of Custody agrees with sample labels?	X		
Samples in proper containers/bottles?	X		
Sample containers intact?	X		
All samples received within holding time?	X		**See Comment about Chlorine and pH
Is there sufficient sample volume to perform the tests?	X		
40mL vials for volatiles & SOCs received with zero headspace?		X	

Total number of bottles received: <i>3</i>	IH sample media:
If applicable, how many sample bottles were shipped from AEL-Tucson?	N/A X

Number of containers received by preservative and by sample number: (If more than 15 samples are rec'd, please continue on separate sheet(s))

Preservative	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A-General	1														
B-HNO3	1														
C-H2SO4	1														
D-HCl															
E-Na2S2O3															
F-NaOH															
G-Sulfide															
H-Na Sulfite															
I-MCAA															
J-Methanol															
K-HAA															
L-Other															

Water-pH acceptable upon receipt? Yes X No N/A

Preservative & pH	pH of samples upon receipt	If pH requires adjustment, list sample number, and reagent ID. number
Metals <2	<2	
Nutrients <2	<2	
Total Phenols <2		
413 (O&G) <2		
418 (TPH) <2		
Cyanide >12		
Sulfide >9		

*Any No response must be detailed in the comments section below. Contact the PM immediately to determine how to proceed.
Refer to SOP 11-001.04, Section 1.8.6. Continue on back if additional space is needed.

**The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.

Comments:

Corrective Action:



Aerotech Environmental Laboratories

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- [] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6199
[] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

04-12-1262

Customer Number:	Page <u>1</u> of <u>1</u>	Sample Type Codes
Customer: Brown & Caldwell	Sampler: Peter Kelm	DW - Drinking Water A - Air
Address: 201 East Washington Suite 500	Project Name: Florence, Copper	WW - Waste Water S - Soil
City, State, Zip: Phoenix, Arizona 85004	Project Number:	HW - Hazardous Waste
Contact: Bach Sylvester	P.O. Number:	Other _____
Phone: 602-567-3894	Fax Results: Y <input checked="" type="radio"/> N <input type="radio"/>	
E-Mail Address:	E-Mail Results: Y <input type="radio"/> N <input checked="" type="radio"/>	

Sample Receipt	Turn Around Request		Analyses Requested
Temperature <u>26</u> °C	24 Hours <input checked="" type="checkbox"/> 48 Hours		
Custody Seals: Yes <u> </u> No <u>✓</u>	72 Hours		
Custody Seals Intact: Yes <u> </u> No <u>N/A</u>	5 Working Days		
Total # of Containers: <u>3</u>	Standard 10 Working Days		
Subject to scheduling & availability (surcharges apply).			

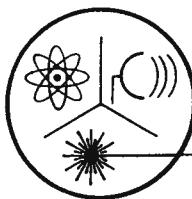
Sample Information

Instructions / Special Requirements: *Invoice: Vanguards Properties 975 Johnson Ferry Rd. Suite 450
Atlanta, GA 30339*

Date: Time: Samples Relinquished By: Received By:
6/29/01 11:30 [Signature]

Analysis performed is subject to the Terms & Conditions available at www.aeroenvirolabs.com or call 866.772.5227 to request a copy.

Chain of Custody, Page 1 of 1, REV 02, 111803, VPOAS



Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121

Website: www.radsafe.com

(480) 897-9459

FAX (480) 892-5446

JAN - 3 2005

BROWN & CALDWELL
PHOENIX

Radiochemical Activity in Water (pCi/L)

Brown & Caldwell
201 East Washington Street, Suite 500
Phoenix, AZ 85024

Sample Received: December 16, 2004
Analysis Completed: December 29, 2004

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Uranium Activity Method 00-07 (pCi/L)	Adjusted Gross Alpha (pCi/L)	Radium 226 Activity Method 903.1 (pCi/L)	Radium 228 Activity Method 904 (pCi/L)	Total Radium (pCi/L)
BHP-4	14.2 ± 1.9	---	---	2.9 ± 0.3	0.7 ± 0.3	3.6 ± 0.4
OWB-3	9.9 ± 1.6	---	---	1.5 ± 0.2	0.6 ± 0.3	2.1 ± 0.4
OWB-9	8.9 ± 1.5	---	---	1.7 ± 0.2	<0.4	1.7 ± 0.2

Robert L. Metzger
Robert L. Metzger, Ph.D., C.H.P.

Arizona Department of Environmental Quality
Drinking Water Additional Radiochemical Analysis Report
Samples To Be Taken At POE Only

System ID	System Name	
12/06/2004	08:50	
Sample Date	Sample Time	Owner/Contact Person
POE#	Owner/Contact Fax Number	

COMPLIANCE SAMPLE TYPE

- | | | |
|--|-------------------|-------|
| <input type="checkbox"/> Reduced Monitoring | Date Q1 Collected | _____ |
| <input type="checkbox"/> Quarterly | Date Q2 Collected | _____ |
| <input type="checkbox"/> Composite of four quarterly samples | Date Q3 Collected | _____ |
| | Date Q4 Collected | _____ |

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	12/17/2004	14.2±1.9	
7500 - Rn			Radon	4004			
00-07	30 µg/L	(reserved)	Combined Uranium	4006			
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	12/28/2004	3.6 ± 0.4	
903.1		1 pCi/L	Radium 226	4020	12/28/2004	2.9±0.3	
904.0		1 pCi/L	Radium 228	4030	12/28/2004	0.7±0.3	

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: BHP-4

Lab ID Number: AZ0462 Lab Name: Radiation Safety Engineering, Inc.

Comments: 24052 Authorized Signature: *att 2-2004*

Date Public Water System Notified: _____

Arizona Department of Environmental Quality
Drinking Water Additional Radiochemical Analysis Report
Samples To Be Taken At POE Only

System ID	System Name	
12/07/2004	09:50	
Sample Date	Sample Time	Owner/Contact Person
POE#	Owner/Contact Fax Number	

COMPLIANCE SAMPLE TYPE

- | | | |
|--|-------------------|-------|
| <input type="checkbox"/> Reduced Monitoring | Date Q1 Collected | _____ |
| <input type="checkbox"/> Quarterly | Date Q2 Collected | _____ |
| <input type="checkbox"/> Composite of four quarterly samples | Date Q3 Collected | _____ |
| | Date Q4 Collected | _____ |

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	12/17/2004	9.9±1.6	
7500 - Rn			Radon	4004			
00-07	30 µg/L	(reserved)	Combined Uranium	4006			
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	12/28/2004	2.1±0.4	
903.1		1 pCi/L	Radium 226	4020	12/28/2004	1.5±0.2	
904.0		1 pCi/L	Radium 228	4030	12/28/2004	0.6±0.3	

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: OWB-3

Lab ID Number: AZ0462 Lab Name: Radiation Safety Engineering, Inc.

Comments: 24053 Authorized Signature: *[Signature]*

Date Public Water System Notified: _____

Arizona Department of Environmental Quality
Drinking Water Additional Radiochemical Analysis Report
Samples To Be Taken At POE Only

System ID	System Name	
12/07/2004	10:00	
Sample Date	Sample Time	Owner/Contact Person
POE#	Owner/Contact Fax Number	

COMPLIANCE SAMPLE TYPE

- | | | |
|--|-------------------|-------|
| <input type="checkbox"/> Reduced Monitoring | Date Q1 Collected | _____ |
| <input type="checkbox"/> Quarterly | Date Q2 Collected | _____ |
| <input type="checkbox"/> Composite of four quarterly samples | Date Q3 Collected | _____ |
| | Date Q4 Collected | _____ |

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	12/17/2004	8.9±1.5	
7500 - Rn			Radon	4004			
00-07	30 µg/L	(reserved)	Combined Uranium	4006			
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	12/28/2004	1.7±0.2	
903.1		1 pCi/L	Radium 226	4020	12/28/2004	1.7±0.2	
904.0		1 pCi/L	Radium 228	4030	12/28/2004	<0.4	

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: OWB-9

Lab ID Number: AZ0462 Lab Name: Radiation Safety Engineering, Inc.

Comments: 24054 Authorized Signature: Patricia J. Murphy

Date Public Water System Notified: _____

Client Information

Name Barb Sylvester

Company Brown & Caldwell

Address 201 E. Washington St. Suite 500

Phone Phoenix, AZ 85024
602-567-3894

PWS#

Sampler Sig.
Phone #

Radiation Safety Engineering, Inc.

3245 North Washington Street

Chandler, Arizona 85225

Analysis Request

Sample ID & Location (DWR#)	Collection		Media (DW* WW* Other)	Drinking Water Compliance	Gross Alpha	Gross Beta	Total Uranium	Isotopic Uranium	Ra-226	Ra-228	H-3	Gamma Spectroscopy	Sr-89/Sr-90	Radon in Water	Radon in Air
BHP 4	12-6-04	0850	DW	✓	240	52									
OWB 3	12-7-04	0950	DW	✓	240	53									
OWB 9	12-7-04	1000	DW	✓	240	54									

Sample Receipt

Total No. of Containers

Chain of Custody Seals

Container Condition

Lab No.

Invoice to:

Unangan Properties, Inc
975 Johnson Ferry Rd.
Suite 450
Atlanta, GA 30342

Instructions/Comments

Relinquished by:

Signature Peter Kelso
Printed Name Peter Kelso
Company Brown & Caldwell
Date 12-16-04

Received by:

Signature Prem Paranjpt
Printed Name Radiation Safety Engineering, Inc.
Company Radiation Safety Engineering, Inc.
Date 12-16-04 16:10

* DW = Drinking Water, WW = Waste Water.